US ERA ARCHIVE DOCUMENT

## **Environmental Compliance Workshop**

## Clean Water



April 16, 2009



# High Expectations for Water Resources in Georgia



















## **Clean Water for Present and Future Generations**



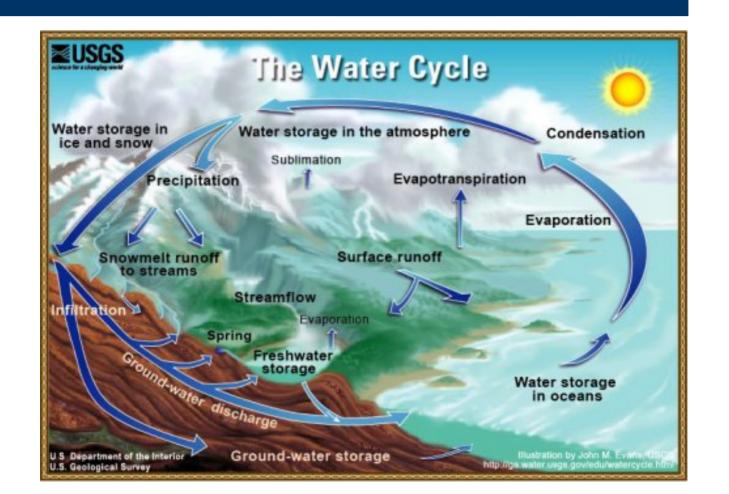




- Clean water is important to Georgians today
- Clean water important to tomorrow's Georgians
- "We do not inherit the earth from our ancestors, we borrow it from our children." [Gov. Sonny Perdue -2007 State of the State Address]



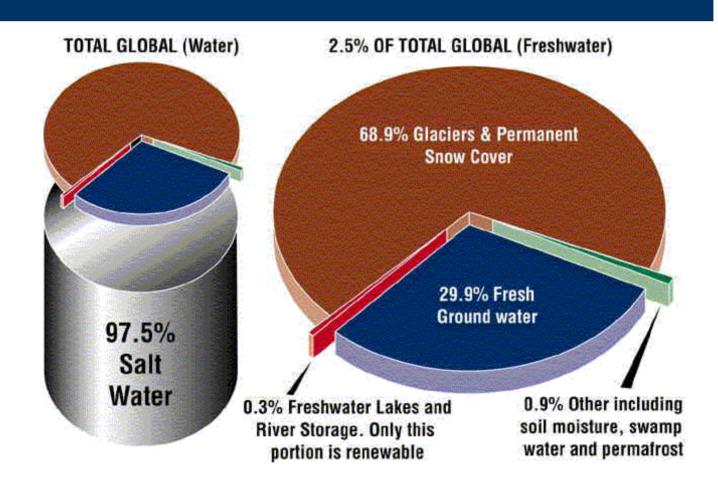
## **The Water Cycle**







## **Global Water Supply**





### **Protect Water Quality**

- Protect water quality by managing pollutant loading to water bodies from...
  - Treated Wastewater Discharges from Municipalities and Industries (<u>Point Source</u> <u>Discharges</u>)
  - Runoff From the Land (<u>Nonpoint Source</u> <u>Discharges</u>)
  - ...so as to not exceed <u>water quality standards</u> and/or the <u>assimilative capacity</u> of the water bodies

### **Definition: Point Source Discharges**

 A point source is a discernable, confined, and discrete conveyance from which pollutants may be discharged to surface waters (e.g., wastewater treatment plant discharges).







## **Definition: Nonpoint Source Discharges**

 Nonpoint sources are diffuse, and generally, but not always, involve accumulation of pollutants on land surfaces that wash off as a result of storm events.







## **Definition: Water Quality Criteria or Standards**

 Water quality criteria or standards are limits on pollutants and consist of both numeric limits and narrative criteria.





## **Definition: Assimilative Capacity**

- The natural capacity of a water body to dilute and absorb pollutants and prevent harmful effects (e.g., damage to public health or physical, chemical, biological quality of the water).
- Determined through studies of the water body
- Where exceeded, the water body is impaired



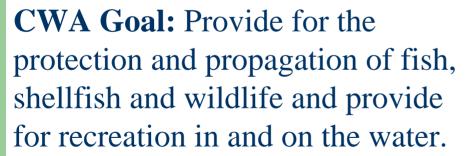
### **Sources of Water Pollution**





### Objective/Goal of the Clean Water Act

**CWA Objective:** To restore and maintain the chemical, physical, and biological integrity of the Nation's waters.











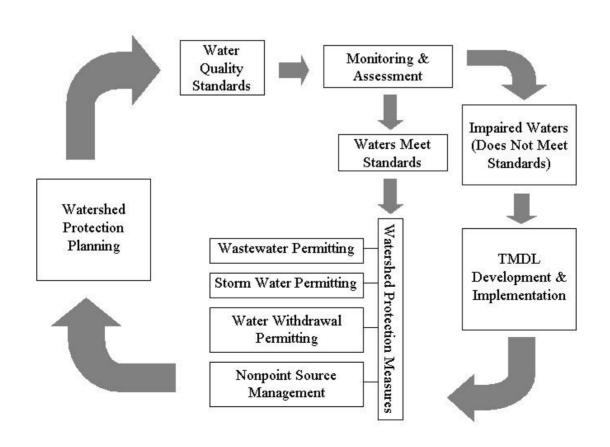






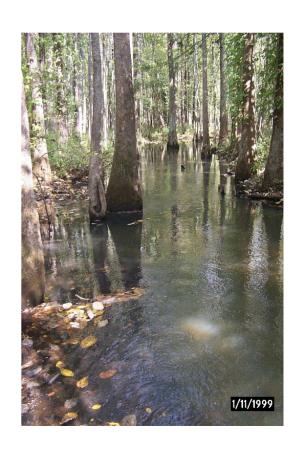


## Clean Water Programs in Georgia

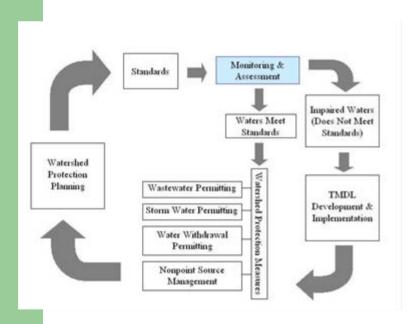


## Water Quality Standards: Designated Uses

- Fishing
- Recreation
- Drinking water
- Wild River
- Scenic River
- Coastal Fishing
- Special Designations

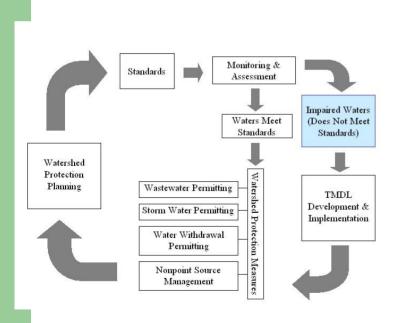


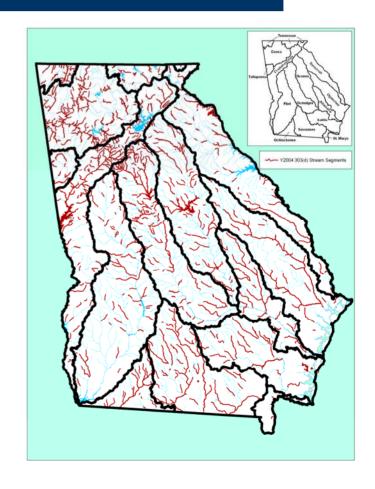
## **Monitoring and Assessment**



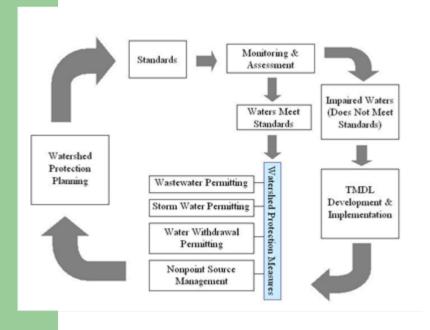
- Monitor and assess compliance with Water Quality Standards
- Assessment results:
  - Meet water quality standards
  - Do not meet water quality standards
    - → Impaired Waters → 303(d) List

## Impaired Waters in Georgia 2008 303(d) List Map





### **Watershed Protection Measures**



- Regulatory
   Permitting Programs
  - Wastewater
  - Storm water
  - Erosion Control
- Nonpoint Source Management

## Point Source Discharge Management

#### NPDES Permits

- Municipal
- Industrial
- Private and Institutional
- Permit Requirements
  - Effluent Limitations
  - Monitoring Requirements
  - Reporting Requirements
  - PretreatmentRequirements





## Nonpoint Source Discharge Management

- Stormwater Permitting
- Erosion and Sediment Control
- Agriculture and Forestry
- Outreach Programs

## **Stormwater Permitting**

#### NPDES Permits

- Phase 1 Large/Medium Municipalities -1994/1995
- Phase II Smaller Municipalities –2002
- General Permits for Eleven Industrial Categories –1998

#### Permit Requirements

- Stormwater Management Plan
- Implementation of Best Management
   Practices
- Annual Reporting





## **Erosion and Sedimentation Control Permitting**

- Georgia State Law
- Local Governments Issue Permits -339 Cities or Counties

- Program Requirements
  - Stormwater Ordinance
  - Stormwater Management Plan
  - Implementation of Best Management Practices
  - Land Disturbing of one acre or greater
  - Education Requirements for Developers



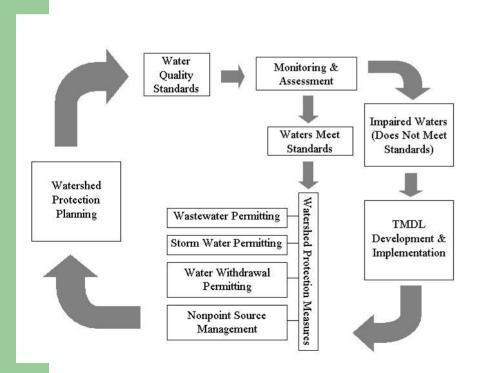
## Nonpoint Source Management Program for Agriculture and Silvicultural Operations

- Lead Agencies
  - Georgia Soil and Water Conservation
     Commission Agriculture
  - Georgia Forestry Commission Forestry
- Non-regulatory Programs
  - Best Management Practices
  - Education Programs
  - Demonstration Projects

### **Outreach Programs**

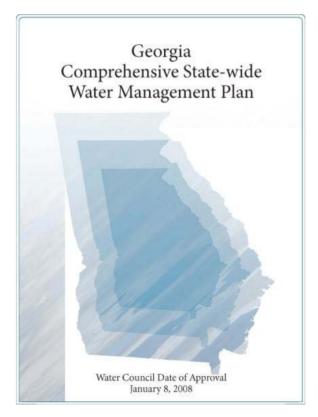
- Georgia Project WET (Water Education for Teachers)
  - Reaches more than 600,000 students annually
  - Annual River of Words Contest –20,000 entries annually
- Georgia Adopt-A-Stream
  - Citizen Stream Protection and Monitoring Programs
  - Rivers Alive Cleanup in 2007 25,000 volunteers cleaned up more than 2,300 miles of streams and removed over 750,000 pounds of trash and garbage
  - 60 Community Sponsored Monitoring Programs involving more than 14,000 Volunteers

## **Watershed Protection Planning**



- Source Water Protection
- Watershed Protection Plans
- TMDL Implementation Plans
- Nonpoint Source
   Management Plans
- Comprehensive State-Wide Water
   Management Planning

## Comprehensive State-wide Water Management Plan





http://www.georgiawaterplanning.org/

## **Water Planning Regions**

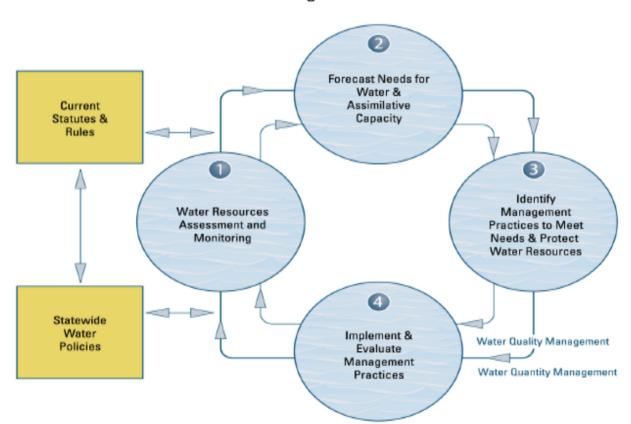


- Regional Water Planning Councils for each Water Planning Region
- Water Planning Regions generally aligned with major water resources
- MNGWPD boundaries set by state law
- Gov., Lt. Gov., and Speaker to selected members of Regional Water Planning Council



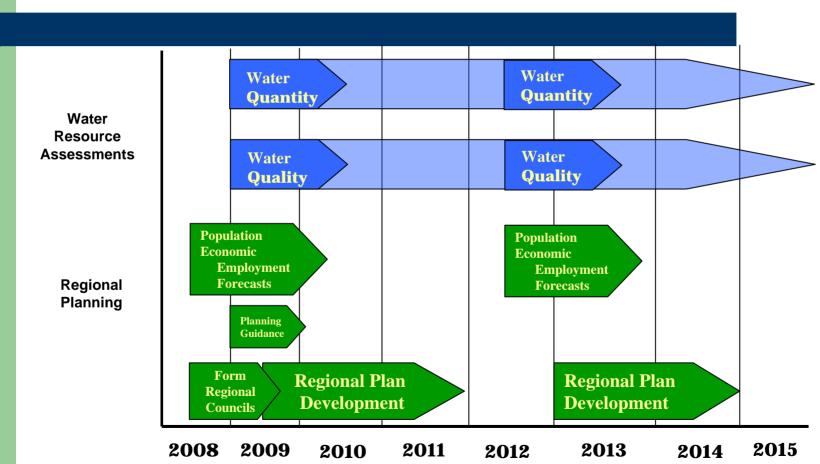
## **Georgia Water Planning Process**

#### Georgia Comprehensive Statewide Water Management Plan





## **Phased Plan Implementation**





## **Georgia EPD Clean Water Contacts**

<ul> <li>Point Source Permitting</li> </ul>	404-362-2680
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- Nonpoint Source Programs 404-675-6240
- Standards and Monitoring 404-675-6236
- Water Withdrawal Permitting 404-675-6236
- Safe Dams
   404-362-2626
- Drinking Water Programs 404-656-4807
- Georgia EPD <a href="http://www.gaepd.org/">http://www.gaepd.org/</a>

### **Questions and Comments**

